

and of this section more especially, as the one with which we are practically best acquainted, we must speak in terms of strong commendation. The fourth section includes Mosses, thirty pages; and the fifth section, the higher Cryptogams, completes 426 pages of compact information on the Cryptogamic Literature of the year.

It could hardly be expected that such a work could be produced within a less period than one year from the completion of the year included within its scope. The whole of the year 1874, for instance, has been put into shape, classified, arranged, analysed, tabulated and printed during 1875, so that it may be distributed to subscribers as early as possible in 1876. It is a book which no one, who would attempt to keep pace with the Literature of any group of Cryptogamia, could afford to do without, and a sovereign thus expended, would save a vast amount of individual labour, which it is presumed all specialists would employ, in keeping a record of such papers and communications as came to their knowledge, with the additional advantage of its being better done. It is under the general editorship of Professor Leopold Just, and is published in Berlin.

THREE FUNGI FROM KASHMIR.

By REV. M. J. BERKELEY, M.A.

The following three Fungi were sent to the Kew Museum by Dr. Aitcheson :—

1. **Russula alutacea**, *Fr. Ep. p. 362.*

Gulmarg, Kashmir. In the woods during the rains. August, 1875.

2. **Lentinus Lecomtei**, *Fr. Ep. p. 388 (Agaricus Lecomtei, Schwein. Car. No. 794.)*

On decomposed wood during rain. Eaten by the natives. Gulmarg.

The specimen sent in its dry state is about $2\frac{1}{2}$ inches across, but it is stated to grow in large masses, and is sometimes twenty times as large. The species occurs in the United States, and has been gathered by Léveillé in Hungary, who has described it under the name of *Agaricus Sainsonii* (Demid. Voy. tab. 1, fig. 3). I have a specimen gathered by my son in Hungary. The vernacular name is Silyh.

3. **Hydnum Aitchesoni**, *B.*—Pileis imbricatis pallidis subtiliter tomentosis glabratis; margine inflexis lobatis fissis; stipite communi centrali crassis, quandoque obsoletis; acutis tenuibus longis fuscescentibus, decurrentibus.

Gulmarg, 8500 feet. Sept., during the rains. Esulent. Vernacular name, Ryle-güb.

About three inches across when fresh, extremely polymorphous; pilei at first minutely tomentose, at length quite smooth, often much imbricated, with the margin inflexed and split; stem sometimes quite obsolete, sometimes distinct, $\frac{1}{2}$ - $\frac{3}{4}$ inch high, $\frac{1}{2}$ inch thick, pallid like the pileus; aculei $\frac{1}{3}$ inch long, acute and slender, somewhat decurrent when the stem is present. Not so common as the last.

It is curious that the *Russula* is not considered esculent, though an esteemed culinary species in Europe.

FAIRY RINGS.

In a recent communication to the Linnean Society Dr. J. H. Gilbert draws attention to the fact that, according to published analyses of various fungi, generally from one-fourth to one-third of their dry substance consists of nitrogenous matters. In fact, fungi would appear to be among the most highly nitrogenous of plants, and to be also very rich in potass. Yet the fungi have developed in "fairy rings" only on the plots *poorest* in nitrogen and potass in such conditions as to be available to most other plants. They flourish strikingly on two plots only, in neither of which either nitrogen or potass is applied as manure, on which the development of grasses is extremely restricted, and their limited growth is due to a deficient available supply of nitrogen, or of potass, or of both, and, where the completion of the Leguminosæ is also weak, in the absence of a more liberal supply of potass.

The questions obviously arise whether the greater prevalence of fungi under such conditions be due to the manurial conditions themselves being directly favourable for their growth, or whether other plants—especially grasses—growing so sluggishly under such conditions, the plants of the lower orders are the better able to overcome the competition and to assert themselves. On this point the further questions arise, whether the fungi prevail simply in virtue of the absence of adverse and vigorous competition, or whether to a greater or less extent as parasites, and so at the expense of the sluggish underground growth of the plants in association with them; or, lastly, have these plants the power of assimilating nitrogen in some form from the atmosphere, or in some form or condition of distribution within the soil not available (at least when in competition) to the plants growing in association with them.